

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-002019**Date Inspected:** 17-Apr-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1200**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1600**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** Chen Chih Ming 03110711**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Side Plates**Summary of Items Observed:**

Caltrans Quality Assurance Inspector Mr. David Kelsey (QA Inspector) arrived at Shanghai Zhenhua Port Machinery Co (ZPMC) to observe Quality Control Inspector Mr. Chen Chie Ming (QC Inspector) of ZPMC perform the duties and responsibilities as outlined in the Welding Quality Control Plan (WQCP) and the Contract Special Provisions and to randomly inspect the in-process welding fabrication of the Orthotropic Box Girder (OBG) SP21 to SP029 side plates.

The Caltrans QA Inspector performed in-process visual inspection on the Flux cored arc welding (FCAW) root pass weld joining the side plates SP21 to the SP29.

Bay 2 New OBG Building:

The Caltrans QA Inspector observed heat straightening of side plate SP65A & SP77A to a maximum temperature not to exceed 650°C per heat straightening procedure HSR1 B-537.

The Caltrans QA Inspector observed 100% Ultrasonic testing being performed by ZPMC Technicians on CJP groove weld splicing the side panels together.

The Caltrans QA Inspector performed Magnetic Particle Testing (MT) verification of the QC MT Inspected and accepted welds. QA Inspector's MT verification appears to be acceptable with AWS D1.5-02 section 6, table 6.1. Reference QA Magnetic Particle Test Report TL-6028 dated 4-17-08 for specific test data.

The Caltrans QA Inspector observed in-process FCAW welding of the previously mentioned side plates within the

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parameters set forth in the WPS-B-T-223-(2) IT. QA Inspector observed the ZPMC QC Inspector and two CAWI monitoring welding voltage, pre-heat & interpass temperatures, weld pass width, profile/size and travel speed. The Caltrans QA Inspector checked the CWI qualifications and randomly verified the pre-heat & interpass temperatures, welding position, welding voltage, weld profile, size and interpass cleaning on the previously mentioned plates.

The in-process welding, heat straightening, and Ultrasonic Testing observed appears to comply with WPS-B-T-224-B-L26-S-1, HSR1 B-496, the approved drawings, the WQCP, Contract Special Provisions and AWS welding code D1.5.

Summary of Conversations:

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Mazen Wahbeh, (818) 292-0659, who represents the Office of Structural Materials for your project.

Inspected By:	Kelsey,David	Quality Assurance Inspector
Reviewed By:	Cuellar,Robert	QA Reviewer
